Clipping Census Shapefiles Tip Sheet

Written February 24, 2012

When working with shapefiles from different sources, coastlines or borders may not exactly line up. To fix this, we can **clip** a shapefile by using another polygon shapefile (like using a cookie cutter) to create a new, clipped version of the incorrectly bordered shapefile.

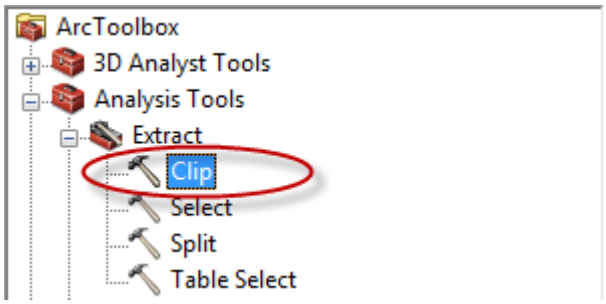
To use the clip method, you will need to have a polygon shape file which will act as the "clipper" (the cookie cutter) in addition to the "clippee" shapefiles. This is an existing polygon layer, like a city or country.

For this example, we will be clipping the 2010 Suffolk County Massachusetts Census Tracts (tl_2010_25_county10), which are downloadable from http://www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html, to prevent them from going over coastlines.

For our "clipper," we will use the Dtl_St shapefile (available on the M: Drive under Country-USA-ESRIDataMap10-USA-Census).

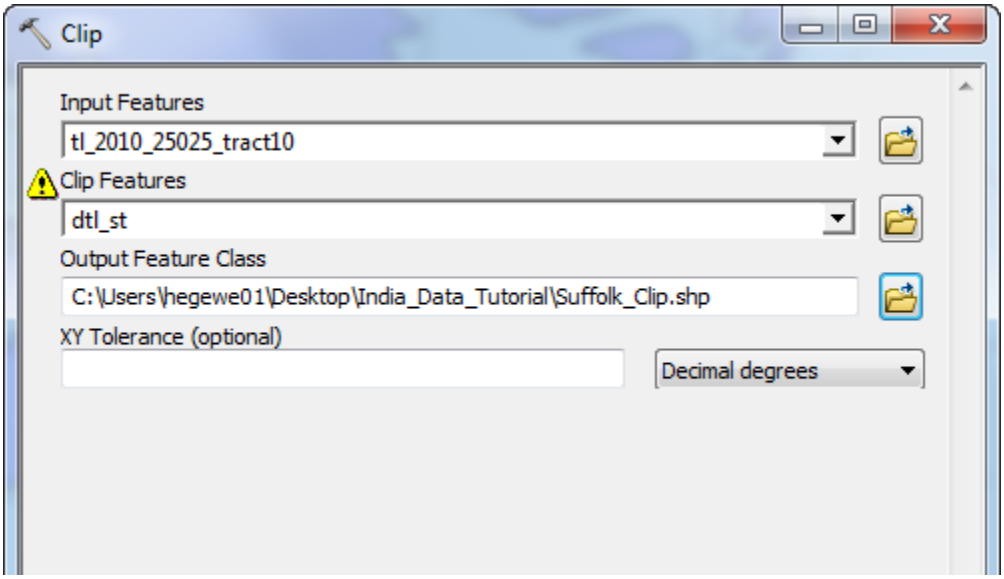
Conducting the Clip

1. In ArcMap, import both your "clipper" and "clipee" files, ignoring the coordinate system error message that occurs when you import the second one, then click on **ArcToolbox** ().
2. Make sure no features are selected on your map by hitting the **Clear Selected Features** button (). If it is greyed out, () it means you have no features selected.
3. In ArcToolbox, go to **Analysis Tools – Extract – Clip** and double-click on *CLIP*.



4. If you need help, click on **Show Help** in the bottom right corner of the dialog box, and read about the *CLIP* function

5. Follow the prompts carefully to select the *Input Features*(the data set to be clipped or the "clippee," in this case, your Census Tracts File) and the *Clip Features* data set (the layer that the clip will be based on or the "clipper," e.g., the dtl_State polygon). Save it to your personal folder and give it a good name



Note that ArcMap will give you another warning that the Coordinate Systems are not the same-you can ignore it.

6. Click **OK** when you are ready to clip.
7. A new Shapefile should appear on your map, showing only those areas of the Census tracts that are actually land.

SAVE YOUR FILE INTO YOUR H: DRIVE